

Product datasheet for **MC208796**

Isl1 (NM_021459) Mouse Untagged Clone

Product data:

Product Type: Expression Plasmids
Product Name: Isl1 (NM_021459) Mouse Untagged Clone
Tag: Tag Free
Symbol: Isl1
Mammalian Cell Selection: Neomycin
Vector: pCMV6-Entry (PS100001)
E. coli Selection: Kanamycin (25 ug/mL)
Fully Sequenced ORF: >MC208796 representing NM_021459
 Red=Cloning site Blue=ORF

TTTTGTAATACGACTCACTATAGGGCGGCCGGGAATTCGTCGACTGGATCCGGTACCGAGGAGATCTGCC
 GCC**CGATCGCC**

ATGGGAGACATGGGCGATCCACCAAAAAAAAAACGTCTGATTTCCCTGTGTGTTGGTTGCGGCAATCAAA
 TTCAGGACAGTATATTCTGAGGGTTTCTCCGGATTTGGAGTGGCATGCAGCATGTTTGAATGTGCGGA
 GTGTAATCAGTATTTGGACGAAAGCTGTACGTGCTTTGTTAGGGATGGGAAAACCTACTGTAAAAGAGAT
 TATATCAGGTTGTACGGGATCAAATGCGCCAAGTGCAGCATAGGCTTCAGCAAGAACGACTTCGTGATGC
 GCGCCCGCTCTAAGGTGTACCACATCGAGTGTTTCCGCTGTGTAGCCTGCAGCCGACAGTCATCCCGGG
 AGACGAATTCGCCCTGCGGGAGGATGGGCTTTTCTGCCGTGCAGACCACGATGTGGTGGAGAGAGCCAGC
 CTGGGAGCTGGAGACCCTCTCAGTCCCTTGATCCAGCGCGCCCTCTGCAAATGGCAGCCGAACCCATCT
 CGGCTAGGCAGCCAGCTCTGCGGCCGACGTCCACAAGCAGCCGGAGAAGACCACCCGAGTGCAGGACTGT
 GCTCAACGAGAAGCAGCTGCACACCTTGCAGGACCTGCTATGCCGCAACCCTCGGCCAGATGCGCTCATG
 AAGGAGCAACTAGTGGAGATGACGGCCCTCAGTCCAGAGTCATCCGAGTGTGGTTTCAAAAACAGCGGT
 GCAAGGACAAGAAACGCAGCATCATGATGAAGCAGCTCCAGCAGCAGCAACCAACGACAAAATAAT
 CCAGGGGATGACAGGAACTCCCATGGTGGCTGCTAGTCCGGAGAGACATGATGGTGGTTTACAGGCTAAC
 CCAGTAGAGGTGCAAAGTTACCAGCCGCCCTGAAAGTACTGAGTGACTTCGCCTTGCAAAGCGACATAG
 ATCAGCCTGCTTTTCAGCAACTGGTCAATTTTTCAGAAGGAGGACCAGGCTCTAATTCTACTGGCAGTGA
 AGTAGCATCGATGTCCTCGCAGCTCCAGATACACCCAACAGCATGGTAGCCAGTCTATTGAGGCATGA

ACGCGTACGCGGCCGCTCGAGCAGAACTCATCTCAGAAGAGGATCTGGCAGCAAATGATATCCTGGATT
 ACAAGGATGACGACGATAAGGTTTAA

Restriction Sites: Sgfl-MluI
ACCN: NM_021459



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Insert Size:	1050 bp
OTI Disclaimer:	Our molecular clone sequence data has been matched to the reference identifier above as a point of reference. Note that the complete sequence of our molecular clones may differ from the sequence published for this corresponding reference, e.g., by representing an alternative RNA splicing form or single nucleotide polymorphism (SNP).
Components:	The ORF clone is ion-exchange column purified and shipped in a 2D barcoded Matrix tube containing 10ug of transfection-ready, dried plasmid DNA (reconstitute with 100 ul of water).
Reconstitution Method:	<ol style="list-style-type: none">1. Centrifuge at 5,000xg for 5min.2. Carefully open the tube and add 100ul of sterile water to dissolve the DNA.3. Close the tube and incubate for 10 minutes at room temperature.4. Briefly vortex the tube and then do a quick spin (less than 5000xg) to concentrate the liquid at the bottom.5. Store the suspended plasmid at -20°C. The DNA is stable for at least one year from date of shipping when stored at -20°C.
RefSeq:	BC132609 , AAI32610
RefSeq Size:	1307 bp
RefSeq ORF:	1050 bp
Locus ID:	16392
UniProt ID:	P61372
Cytogenetics:	13 D2.2
Gene Summary:	DNA-binding transcriptional activator (PubMed:14664703, PubMed:24643061, PubMed:25775587, PubMed:22343712). Recognizes and binds to the consensus octamer binding site 5'-ATAATTAA-3' in promoter of target genes (PubMed:24643061, PubMed:25775587). Plays a fundamental role in the gene regulatory network essential for retinal ganglion cell (RGC) differentiation (PubMed:25775587). Cooperates with the transcription factor POU4F2 to achieve maximal levels of expression of RGC target genes and RGC fate specification in the developing retina (PubMed:24643061, PubMed:25775587). Involved in the specification of motor neurons in cooperation with LHX3 and LDB1 (PubMed:18583962). Binds to insulin gene enhancer sequences (By similarity). Essential for heart development. Marker of one progenitor cell population that give rise to the outflow tract, right ventricle, a subset of left ventricular cells, and a large number of atrial cells as well, its function is required for these progenitors to contribute to the heart. Controls the expression of FGF and BMP growth factors in this cell population and is required for proliferation and survival of cells within pharyngeal foregut endoderm and adjacent splanchnic mesoderm as well as for migration of cardiac progenitors into the heart (PubMed:14667410).[UniProtKB/Swiss-Prot Function]